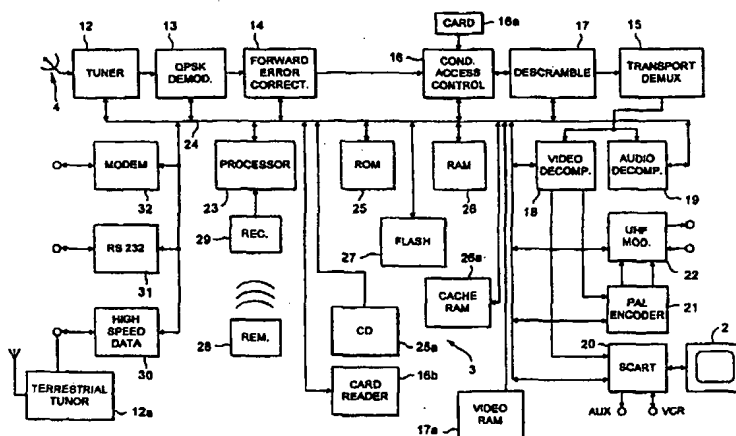




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(22) International Filing Date: 14 June 1999 (14.06.99)</p>			
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<p>(71) Applicant (for all designated States except US): BRITISH SKY BROADCASTING LIMITED [GB/GB]; Grant Way, Isleworth, Middlesex TW7 5QD (GB).</p>			
<p>(72) Inventors; and</p>			
<p>(75) Inventors/Applicants (for US only): HOLLIDAY, David [GB/GB]; British Sky Broadcasting Limited, Grant Way, Isleworth, Middlesex TW7 5QD (GB). CROSSLEY, Robin [GB/GB]; British Sky Broadcasting Limited, Grant Way, Isleworth, Middlesex TW7 5QD (GB). JAMES, Nicholas [GB/GB]; British Sky Broadcasting Limited, Grant Way, Isleworth, Middlesex TW7 5QD (GB).</p>		<p>Published</p>	
		<p><i>With international search report.</i></p>	
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<p>(74) Agents: WHITTEN, George, Alan et al.; R.G.C. Jenkins & Co., 26 Caxton Street, London SW1H 0RJ (GB).</p>		<p>(88) Date of publication of the international search report:</p>	<p>10 February 2000 (10.02.00)</p>

(54) Title: TELEVISION SIGNALS RECEIVER



(57) Abstract

A receiver for receiving television signals is arranged to receive signals in a plurality of channels. Each signal defines a television programme and at least a signal in one of the channels comprises compressed data defining broadcast events in the channels from time to time. The receiver is arranged to produce output signals defining an image of events in the programme schedule for displaying on a television screen. The receiver comprises means for receiving data defining a dictionary representing text portions, means for decoding the programme scheduling data to identify text portions in the dictionary, and means for constructing the image of events from the identified text portions. A signal in each channel comprises a bouquet identity and a sub-bouquet identity for the channel. The receiver comprises means for storing a reference bouquet identity and one or more reference sub-bouquet identities, means for comparing the bouquet identity and sub-bouquet identity for a channel in a received signal with the reference bouquet and sub-bouquet identities and means for outputting the received television signal for display of the programme or other services defined thereby depending on the comparison.

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 99/01873

A. CLASSIFICATION OF SUBJECT MATTER IPC 6 H04N5/445				
According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 6 H04N				
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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)				
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-/-				
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.				
* Special categories of cited documents :				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; border: none;"> "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed </td> <td style="width: 50%; vertical-align: top; border: none;"> "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family </td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family			
Date of the actual completion of the international search <div style="text-align: center; font-weight: bold;">3 December 1999</div>		Date of mailing of the international search report <div style="text-align: center; font-weight: bold;">14. 12. 99</div>		
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer <div style="text-align: center; font-weight: bold;">Materne, A</div>		

INTERNATIONAL SEARCH REPORT

International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB 99/01873

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

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- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/GB 99/01873

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-8

text compression using dictionaries representing text portions

2. Claims: 9-13

regionalizing broadcasted channels by using channel bouquets according to a given region of interest

3. Claims: 14, 15

sorting schedule data according to a given parameter

4. Claims: 16-18

caching EPG schedule data for merging data from various environments

5. Claim : 19

time-shifted services for broadcasting a same movie from different channels at different start times

6. Claims: 20, 21

EPG scheduling pay per view programmes

INTERNATIONAL SEARCH REPORT

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